

#2

01/16/02

OIPE

RAW SEQUENCE LISTING

DATE: 01/16/2002

PATENT APPLICATION: US/09/996,263

TIME: 18:19:46

Input Set : N:\Crf3\RULE60\09996263.raw

Output Set: N:\CRF3\01162002\I996263.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: Phillip Dan Cook
 6 Andrew Kawasaki

8 (ii) TITLE OF INVENTION: Sugar Modified Oligonucleotides

10 (iii) NUMBER OF SEQUENCES: 37

12 (iv) CORRESPONDENCE ADDRESS:

13 (A) ADDRESSEE: Woodcock Washburn Kurtz Mackiewicz and Norris

14 (B) STREET: One Liberty Place - 46th Floor

15 (C) CITY: Philadelphia

16 (D) STATE: PA

17 (E) COUNTRY: U.S.A.

18 (F) ZIP: 19103

20 (v) COMPUTER READABLE FORM:

21 (A) MEDIUM TYPE: 3.5 inch disk, 720 Kb

22 (B) COMPUTER: IBM PC compatible

23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS

24 (D) SOFTWARE: WordPerfect 5.1

26 (vi) CURRENT APPLICATION DATA:

C--> 27 (A) APPLICATION NUMBER: US/09/996,263

C--> 28 (B) FILING DATE: 28-Nov-2001

29 (C) CLASSIFICATION:

31 (vii) PRIOR APPLICATION DATA:

32 (A) APPLICATION NUMBER: 08/471,973

33 (B) FILING DATE:

35 (viii) ATTORNEY/AGENT INFORMATION:

36 (A) NAME: Joseph Lucci

37 (B) REGISTRATION NUMBER: 33,307

38 (C) REFERENCE/DOCKET NUMBER: ISIS-2005

40 (ix) TELECOMMUNICATION INFORMATION:

41 (A) TELEPHONE: 215-568-3100

42 (B) TELEFAX: 215-568-3439

44 (2) INFORMATION FOR SEQ ID NO: 1:

45 (i) SEQUENCE CHARACTERISTICS:

46 (A) LENGTH: 17 bases

47 (B) TYPE: nucleic acid

48 (C) STRANDEDNESS: single

49 (D) TOPOLOGY: linear

50 (iv) ANTI-SENSE: yes

51 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

53 CCACACCGAC GGCGCCC 17

55 (2) INFORMATION FOR SEQ ID NO: 2:

56 (i) SEQUENCE CHARACTERISTICS:

57 (A) LENGTH: 20 bases

58 (B) TYPE: nucleic acid

59 (C) STRANDEDNESS: single

60 (D) TOPOLOGY: linear

ENTERED

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```
61      (iv) ANTI-SENSE: yes
62      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
64 CTTATATTCC GTCATCGCTC      20
66 (2) INFORMATION FOR SEQ ID NO: 3:
67      (i) SEQUENCE CHARACTERISTICS:
68          (A) LENGTH: 20 bases
69          (B) TYPE: nucleic acid
70          (C) STRANDEDNESS: single
71          (D) TOPOLOGY: linear
72      (iv) ANTI-SENSE: yes
73      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
75 TCCGTCATCG CTCCTCAGGG      20
77 (2) INFORMATION FOR SEQ ID NO: 4:
78      (i) SEQUENCE CHARACTERISTICS:
79          (A) LENGTH: 20 bases
80          (B) TYPE: nucleic acid
81          (C) STRANDEDNESS: single
82          (D) TOPOLOGY: linear
83      (iv) ANTI-SENSE: yes
84      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
86 AAAACGTCAG CCATGGTCCC      20
88 (2) INFORMATION FOR SEQ ID NO: 5:
89      (i) SEQUENCE CHARACTERISTICS:
90          (A) LENGTH: 18 bases
91          (B) TYPE: nucleic acid
92          (C) STRANDEDNESS: single
93          (D) TOPOLOGY: linear
94      (iv) ANTI-SENSE: yes
95      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
97 TTCTCGCTGG TGAGTTTC      18
99 (2) INFORMATION FOR SEQ ID NO: 6:
100      (i) SEQUENCE CHARACTERISTICS:
101          (A) LENGTH: 17 bases
102          (B) TYPE: nucleic acid
103          (C) STRANDEDNESS: single
104          (D) TOPOLOGY: linear
105      (iv) ANTI-SENSE: yes
106      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
108 TCTCGCTGGT GAGTTTC      17
110 (2) INFORMATION FOR SEQ ID NO: 7:
111      (i) SEQUENCE CHARACTERISTICS:
112          (A) LENGTH: 20 bases
113          (B) TYPE: nucleic acid
114          (C) STRANDEDNESS: single
115          (D) TOPOLOGY: linear
116      (iv) ANTI-SENSE: yes
117      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
119 TCCCGCCTGT GACATGCATT      20
121 (2) INFORMATION FOR SEQ ID NO: 8:
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122 (i) SEQUENCE CHARACTERISTICS:
123 (A) LENGTH: 20 bases
124 (B) TYPE: nucleic acid
125 (C) STRANDEDNESS: single
126 (D) TOPOLOGY: linear
127 (iv) ANTI-SENSE: yes
128 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
130 TCCTCCTCCC CGCGCGGGT 20
132 (2) INFORMATION FOR SEQ ID NO: 9:
133 (i) SEQUENCE CHARACTERISTICS:
134 (A) LENGTH: 20 bases
135 (B) TYPE: nucleic acid
136 (C) STRANDEDNESS: single
137 (D) TOPOLOGY: linear
138 (iv) ANTI-SENSE: yes
139 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
141 CTCGCCCCGT CCTCCTCCCC 20
143 (2) INFORMATION FOR SEQ ID NO: 10:
144 (i) SEQUENCE CHARACTERISTICS:
145 (A) LENGTH: 20 bases
146 (B) TYPE: nucleic acid
147 (C) STRANDEDNESS: single
148 (D) TOPOLOGY: linear
149 (iv) ANTI-SENSE: yes
150 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
152 TTCTCGCCCG CTCCTCCTCC 20
154 (2) INFORMATION FOR SEQ ID NO: 11:
155 (i) SEQUENCE CHARACTERISTICS:
156 (A) LENGTH: 20 bases
157 (B) TYPE: nucleic acid
158 (C) STRANDEDNESS: single
159 (D) TOPOLOGY: linear
160 (iv) ANTI-SENSE: yes
161 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
163 TTCTCCTCCT CCCCTGGCAG 20
165 (2) INFORMATION FOR SEQ ID NO: 12:
166 (i) SEQUENCE CHARACTERISTICS:
167 (A) LENGTH: 20 bases
168 (B) TYPE: nucleic acid
169 (C) STRANDEDNESS: single
170 (D) TOPOLOGY: linear
171 (iv) ANTI-SENSE: yes
172 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
174 CTGGCTTCTC CTCCTCCCCT 20
176 (2) INFORMATION FOR SEQ ID NO: 13:
177 (i) SEQUENCE CHARACTERISTICS:
178 (A) LENGTH: 20 bases
179 (B) TYPE: nucleic acid
180 (C) STRANDEDNESS: single

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181         (D) TOPOLOGY: linear
182     (iv) ANTI-SENSE: yes
183     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 13:
185 CCTGCTGGCT TCTCCTCCTC      20
187 (2) INFORMATION FOR SEQ ID NO: 14:
188     (i) SEQUENCE CHARACTERISTICS:
189         (A) LENGTH: 20 bases
190         (B) TYPE: nucleic acid
191         (C) STRANDEDNESS: single
192         (D) TOPOLOGY: linear
193     (iv) ANTI-SENSE: yes
194     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 14:
196 TCTGGCGCTG CACCACTCTC      20
198 (2) INFORMATION FOR SEQ ID NO: 15:
199     (i) SEQUENCE CHARACTERISTICS:
200         (A) LENGTH: 20 bases
201         (B) TYPE: nucleic acid
202         (C) STRANDEDNESS: single
203         (D) TOPOLOGY: linear
204     (iv) ANTI-SENSE: yes
205     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 15:
207 UAGGAGAUGC CUAAGGCUUU      20
209 (2) INFORMATION FOR SEQ ID NO: 16:
210     (i) SEQUENCE CHARACTERISTICS:
211         (A) LENGTH: 20 bases
212         (B) TYPE: nucleic acid
213         (C) STRANDEDNESS: single
214         (D) TOPOLOGY: linear
215     (iv) ANTI-SENSE: yes
216     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 16:
218 GCUAUGUCGA CACCCAAUUC      20
220 (2) INFORMATION FOR SEQ ID NO: 17:
221     (i) SEQUENCE CHARACTERISTICS:
222         (A) LENGTH: 20 bases
223         (B) TYPE: nucleic acid
224         (C) STRANDEDNESS: single
225         (D) TOPOLOGY: linear
226     (iv) ANTI-SENSE: yes
227     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 17:
229 CAUAGGAGAU GCCUAAGGCT      20
231 (2) INFORMATION FOR SEQ ID NO: 18:
232     (i) SEQUENCE CHARACTERISTICS:
233         (A) LENGTH: 21 bases
234         (B) TYPE: nucleic acid
235         (C) STRANDEDNESS: single
236         (D) TOPOLOGY: linear
237     (iv) ANTI-SENSE: yes
238     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 18:
240 GCGUUTGCTC TTCTTCUUGC G      21

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242 (2) INFORMATION FOR SEQ ID NO: 19:
243 (i) SEQUENCE CHARACTERISTICS:
244 (A) LENGTH: 21 bases
245 (B) TYPE: nucleic acid
246 (C) STRANDEDNESS: single
247 (D) TOPOLOGY: linear
248 (iv) ANTI-SENSE: yes
249 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 19:
251 GCGUUUGCTC TTCTUCUUGC G 21
253 (2) INFORMATION FOR SEQ ID NO: 20:
254 (i) SEQUENCE CHARACTERISTICS:
255 (A) LENGTH: 20 bases
256 (B) TYPE: nucleic acid
257 (C) STRANDEDNESS: single
258 (D) TOPOLOGY: linear
259 (iv) ANTI-SENSE: yes
260 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 20:
262 UGCATCCCCC AGGCCACCAT 20
264 (2) INFORMATION FOR SEQ ID NO: 21:
265 (i) SEQUENCE CHARACTERISTICS:
266 (A) LENGTH: 15 bases
267 (B) TYPE: nucleic acid
268 (C) STRANDEDNESS: single
269 (D) TOPOLOGY: linear
270 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 21:
271 CGACTATGCA AGTAC 15
273 (2) INFORMATION FOR SEQ ID NO: 22:
274 (i) SEQUENCE CHARACTERISTICS:
275 (A) LENGTH: 17 bases
276 (B) TYPE: nucleic acid
277 (C) STRANDEDNESS: single
278 (D) TOPOLOGY: linear
279 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 22:
281 CTCGTACCTT CCGGTCC 17
283 (2) INFORMATION FOR SEQ ID NO: 23:
284 (i) SEQUENCE CHARACTERISTICS:
285 (A) LENGTH: 12 bases
286 (B) TYPE: nucleic acid
287 (C) STRANDEDNESS: single
288 (D) TOPOLOGY: linear
289 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 23:
291 GAGCUCCAG GC 12
293 (2) INFORMATION FOR SEQ ID NO: 24:
294 (i) SEQUENCE CHARACTERISTICS:
295 (A) LENGTH: 15 bases
296 (B) TYPE: nucleic acid
297 (C) STRANDEDNESS: single
298 (D) TOPOLOGY: linear
299 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 24:

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/996,263

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Output Set: N:\CRF3\01162002\I996263.raw

L:27 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]

L:28 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]